FALL 1979 CATALOG 26

# GILFER

## NORTH AMERICA'S SHORTWAVE MAIL ORDER PLACE

*One-Stop Armchair Shopping for All Your SWL Needs*

- Receivers • Digital Readouts • Calibrators • Antenna Tuners
- Antennas • Loops • Preselectors • World Clocks • Headphones
- CW/RTTY Processors • Globes • World Radio TV Handbook
- Log Books • Reporting Forms • QSL Albums • SWL Books
- Frequency Lists • Pattern Books • Station Address Books

## GILFER SHORTWAVE

Box 239 Park Ridge, NJ 07656 USA Ph 201/391-7887

# Hello from SWL Headquarters . . .

Jeanne and O. Perry Ferrell

To those of you new to shortwave listening or looking over a GILFER catalog for the first time, we say "Welcome" to a fascinating and exciting hobby. GILFER can help you enjoy SWL'ing because we are the only direct-mail single source for ALL your SWL'ing needs.

We know how difficult it is for you to find the right receiver, antenna or book from a store that sells CB and ham radio or is an unknown inexperienced dealer. We've served individuals —by the thousands, like yourself—for 26 years. We offer the best equipment and publications we can find anywhere in the world. Our modern facilities will speed your order on its way in the least time. Experience and integrity are always at your service.

**WRH-33 $14.95**

## The "MUST" Book for Every Listener

**New 33rd Edition WRH-33 $14.95**

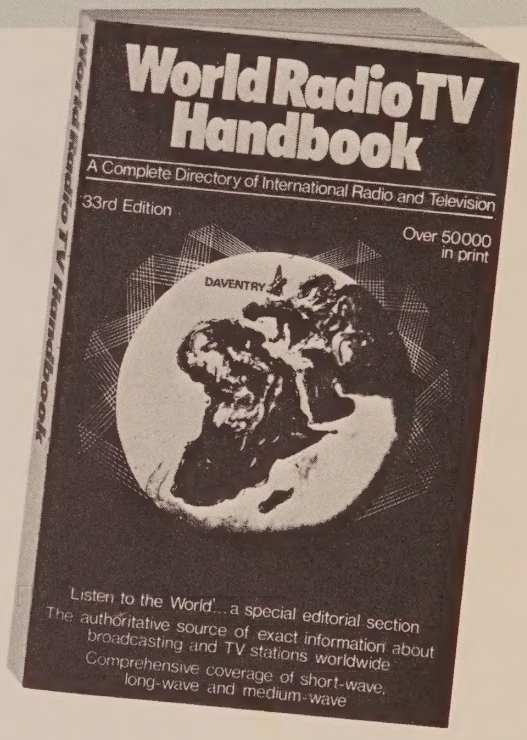
### The Most Complete and Authoritative Guide to World Broadcasting Available

- **Recommended by Every Avid SWL**
- **Lists all broadcasting stations SW-AM-FM-TV (high power USA)**
- **Lists by frequency shortwave stations worldwide**
- **Lists country-by-country, program data, schedules, power, beam headings, etc.**
- **Includes special feature articles**

### Listen to the World With WRTVH By Your Side.

So indispensable to knowledgeable shortwave listening, it's like a "map" to the world of broadcasting — without it you are lost. But with it, you can track down any station and any detail of its broadcasting.

Schedules, frequencies, countries, programming, shortwave, medium wave, FM, TV call signs, addresses, transmitter powers, beam antenna bearings, geographic coordinates, relay stations, slogans, interval signals, feature programs, home service and regional transmissions. All this and much more is packed into this unusual SWL book.


World Radio TV Handbook
A Complete Directory of International Radio and Television
33rd Edition
Over 50,000 in print
DAVENTRY
Listen to the World'... a special editorial section
The authoritative source of exact information about broadcasting and TV stations worldwide
Comprehensive coverage of short-wave, long-wave and medium-wave

In the 33rd edition you'll also find fascinating articles by Reg Kennedy (BBC World Radio Club) on "The Radio Missionaries" and George Jacobs on how International Shortwave Broadcasting is very much alive and kicking. Chris Martin writes about mediumwave AM band DX'ing from "down under" with descriptions of the exotic spots for field trips. West German DX'er Gerd Klawitter explains how to DX without continuously sitting in front of your receiver through the means of a clock timer.

Includes Last Minute Information and Schedule Changes, Medium Wave DX'ing from Australasia, New AM Band Allocations, Solar Activity Expected Throughout 1979 and Predictions on Most Suitable Bands, plus much more.

Whether you are a beginner or an experienced listener, this new edition belongs beside your receiver.

**WRH-33 $14.95**

# The New Yaesu FRG-7000 — best receiver under $1,000!

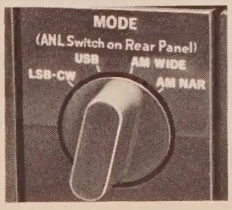
**FRG-7000-424 $625.00 includes special GILFER modifications, add shipping**

## The '7000' Is Head and Shoulders Above Any Receiver In the $500-$1,000 Category . . . It's Great To Begin With, And GILFER Makes It Just Better Than Ever

That's the Yaesu FRG-7000. A quintuple conversion solid-state superheterodyne design using a synthesized MHz heterodyne oscillator known as the "Wadley Loop System," the "7000" covers the entire high frequency system from 0.25 to 29.9 MHz with a precision and reliability that's unmatched by receivers in its price range.

Advanced technology FET RF stage yields a sensitivity of 0.7 $\mu$V and the five conversion stages produce a high gain IF signal for superior AGC operation and weak signal detection as well as rock-like stability (less than 500 Hz drift per ½ hr. after warmup). Thoughtfully engineered throughout, the "7000" contains such little niceties as an adjustment for the 1 MHz crystal to keep it exactly on frequency; 3 separate, carefully stabilized power supplies; a rock-solid crystal-controlled BFO that is off-set by 1.5 kHz for optimum LSB and USB detection.

GILFER makes a great receiver even better by improving the "7000" selectivity with a 4 kHz filter (at −6 dB) so there are two AM selectivity positions — Wide and Narrow. In the narrow position (2.4 kHz) you can slice an AM signal in half! The Mode switch is also rewired to reflect the change and a new label substituted, and the ANL switch is moved to the rear panel.




Operationally, the "7000" has few peers at any price. The frequency readout is digital (5 bright red LEDs for 1 kHz resolution), and a built-in clock, also digital, displays both Local and GMT times (convenient front panel switches make timesetting easy). And there is a built-in CPU Clock Timer — a really unique feature that tends to your shortwave tuning even when you aren't at home! The clock has a timing feature that will turn on the "7000" and control a tape recorder — just set the start and stop times of the broadcast you want to record — the "7000" does the rest — turns itself on, starts the recorder, stops the recorder after the elapsed period of time you set into it, and turns itself off! Absentee shortwave listening! You'll never miss another shortwave broadcast because of a schedule conflict.

Other convenience features of the "7000" include Automatic Noise Limiter for noise free AM reception, amplified AGC, RF attenuator with on-off switch to hold down strong nearby signals, color-coded tuning dial for the Preselector to permit fast peaking of the set for maximum sensitivity, a calibrated S-meter for help in logging DX, tone control for sound the way you want it, front panel recording jack and headphone jack, front panel built-in speaker for easy listening, rear panel remote operating connector, connectors for various types of antenna lead-ins.

Additional new improvements in the GILFER FRG-7000-424 receiver include an improved noise limiter and provision for operation from 13-15 volts DC. A fuse-protected battery cable is supplied. DC requirement is about 1.5 amperes (no dry cells — wet cell battery, only). Your FRG-7000-424 is getting better and may well be the last receiver you'll ever need to buy.

**FRG-7000-424 $625.00 includes special GILFER modifications, add shipping**

**FRG-7-1 Yaesu FRG-7 On-the-air tested $325.00 plus shipping**

**FRG-7-4 Yaesu FRG-7 Modified with 4 kHz filter installed $380.00 plus shipping**

## The Yaesu FRG-7 Is A Fine General-Coverage Receiver — But When GILFER Gets Through With It, It's A GREAT Shortwave Receiver — And It's Low Cost, Too!

In these days of inflated promises at inflated prices, the GILFER-modified Yaesu FRG-7 seems almost too good to be true. But here it is, especially made to be just what you shortwave listeners want in a communications-style receiver, and at a price that even the casual SWL can justify.

Of course, to get a great receiver, GILFER had to start with a fine one at the outset. The Yaesu FRG-7 Mk III is just that. Its all solid-state circuitry is built to last, it uses the drift and image-free design known as the Wadley Loop Circuit, and its direct frequency readout uses separate dials for MHz and kHz settings (additive readout accuracy is better than ±5 kHz). All three major tuning controls use rotating drums. Other fine features include Fine Tuning (SSB Clarifier) control, LED indicator for "MHz" lock and maximum sensitivity, automatic switchable noise limiter, and 3-position audio tone switch. The front panel also has a standard phone jack, tape recording jack, dial-light saver switch, 10 or 20 dB attenuator switch, volume control, and "Mode" switch (USB/CW, LSB, AM, and AM/ANL). It can be powered by 117 VAC or from an internal 8 "D" cell battery pack. Its attractive cabinet is finished in gray and black, measures 13½"w × 6½"h × 11½"d, and weighs in at 16 lbs.

**And now here's how GILFER makes it great!** Of course it goes, almost without saying, that here at GILFER we carefully inspect and verify operation of every FRG-7 we ship (no silent mysteries for our customers). But, most important — GILFER modifies every i-f strip by substituting an expensive top quality ceramic filter for the original factory-supplied filter. The result in improved selectivity (station-separating ability) is spectacular: the selectivity curve gets steeper and narrower (only 4 kHz wide instead of 6 kHz at −6 dB and cut in half at −60 dB to only 10 kHz instead of the original 20 kHz). And at the same time, we adjust the agc release and S-meter damping time for better action, reset the BFO for the best possible SSB reception, add a digital counter output jack, recalibrate MHz and kHz and supply each customer with a set of dial deviation figures for future reference and **Proof of Performance** (that means we give you the figures measured on your receiver so you know where your dial stands on accuracy when you get it).

**FRG-7-1 Yaesu FRG-7 On-the-air tested $325.00 plus shipping**

**FRG-7-4 Yaesu FRG-7 Modified with 4 kHz filter installed $380.00 plus shipping**

**FRG-7-3 Yaesu FRG-7 Modified with 3 kHz filter installed $392.50 plus shipping**

OVERSEAS CUSTOMERS ONLY
Send one IRC for details on our FRG-7 "MOD-1" kit to vastly improve the selectivity and agc operation.



**Speed Your Visa/MC Card Order, Phone (201) 391-7887**

**SX-59 $87.00** **GAR-7 $169.00**

## Increase the Sensitivity of Your Receiver — Add the New Mizuho SX-59 Preselector/Preamplifier

Does your receiver need a little more oomph? Are you missing out on some of those weak DX signals? Here's the best way to hype up any receiver.

Add the new Mizuho SX-59 preselector and let this low noise preamplifier add 3 or 4 S-units of sensitivity. Tunable in 3 switched bands from 3 to 30 MHz, the SX-59 is completely automatic — turn it on and it connects itself into the antenna circuit. Turn it off and the antenna is re-connected right back to the receiver — no manual bypass switching ever required.

Beautifully styled in a solidly-made gray colored cabinet, the SX-59 can also introduce an extra 20 dB of attenuation to cope with those excessively strong signals that make SW receivers climb the walls. The RF GAIN control is fully adjustable and an LED tells you when the power is on. Comes with dual input/output connections to match virtually every receiver and antenna combination. 117-volt AC powered.

Simple to use. Select the band and tweak the tuning dial for maximum signal. You'll be surprised at what you're missing — and if you've an old single-conversion receiver, the SX-59 will reduce images by 4 or 5 S-units, besides!

May be used with amateur radio (100 watts) and CB transceivers by simple wiring change to "remote" control operation terminal on rear panel.

**SX-59 $87.00**

## Add Digital Readout To Your FRG-7 Receiver with the GILFER GAR-7

Here's how to move your FRG-7 or SSR-1 receiver with its plain old dial into the digital age. The GILFER GAR-7 Frequency Counter is easily attached to any receiver using the Wadley loop circuit (separate MHz settings). Completely foolproof, well-built, error-free and birdie or bobble-free, the GAR-7 reads the last 4 digits of the received frequency down to 100 Hertz. The display is made up of four 7-segment; 0.3" red LEDs with a "memory strobe" circuit to prevent flickering. The CMOS circuit will not load your receiver and no buffer stage is required — you can install the necessary connection in less than 30 minutes. Offset errors can be compensated for by simple under the cabinet adjustment screw. For the utmost in frequency accuracy in receiver readouts, the GAR-7 is the best there is — and it's just been reduced in price! Comes complete with connecting cables and illustrated Instruction Sheet for fast retrofit to the FRG-7, SSR-1, or even the ancient Barlow XCR-30. Looks great, too, on top of your receiver as you can see above. Measures just 2⅜"h × 8¾"d × 5"w. 117 volt AC powered.

**GAR-7 $169.00**

**Extension Speaker**

We are now offering the Yaesu SP-120 extension speaker for attachment to either your FRG-7-4 or FRG-7000-424 receiver. Voice attenuated sound output, the SP-120 measures 6"h x 11¾"d x 8½"w. Mini-plug on cord. Matches 4-16 ohms from receiver.

**SP-120 $27.00**

# A GILFER Exclusive In The U.S.A. — The NRD-505 All-Band Synthesized Receiver — World's Best Value In Super-Sophisticated SWL Equipment.

**"In all my years of using shortwave receivers, I have never before encountered one with this level of performance . . . It's nothing short of sensational . . . To be recommended to all who can afford the finest."**

These words of praise for the NRD-505 from O.P. Ferrell of GILFER are perhaps the primary reason why GILFER now is the exclusive U.S. distributor of this fine equipment. Perry Ferrell says that the only receivers with this level of performance are surveillance types costing tens of thousands of dollars and not available to the general public for shortwave listening.

The NRD-505 is built by the Japan Radio Company, a firm noted for its radio communications equipment leadership for more than 60 years. That the NRD-505 is one of their highest achievements in consumer electronics is evident in its thoughtful design.

**The Computer That Speaks In Shortwave.** From its elegantly simple front panel to its regimented interior, the genesis of the NRD-505 is evident . . . computer technology.

The first consumer receiver built on the *Card-Frame System,* the NRD-505 uses the modular design approach with 9 edge-mounted glass-epoxy circuit boards and an interconnecting "mother" board. The result is computer reliability and uniformity plus fantastic ease in servicing.

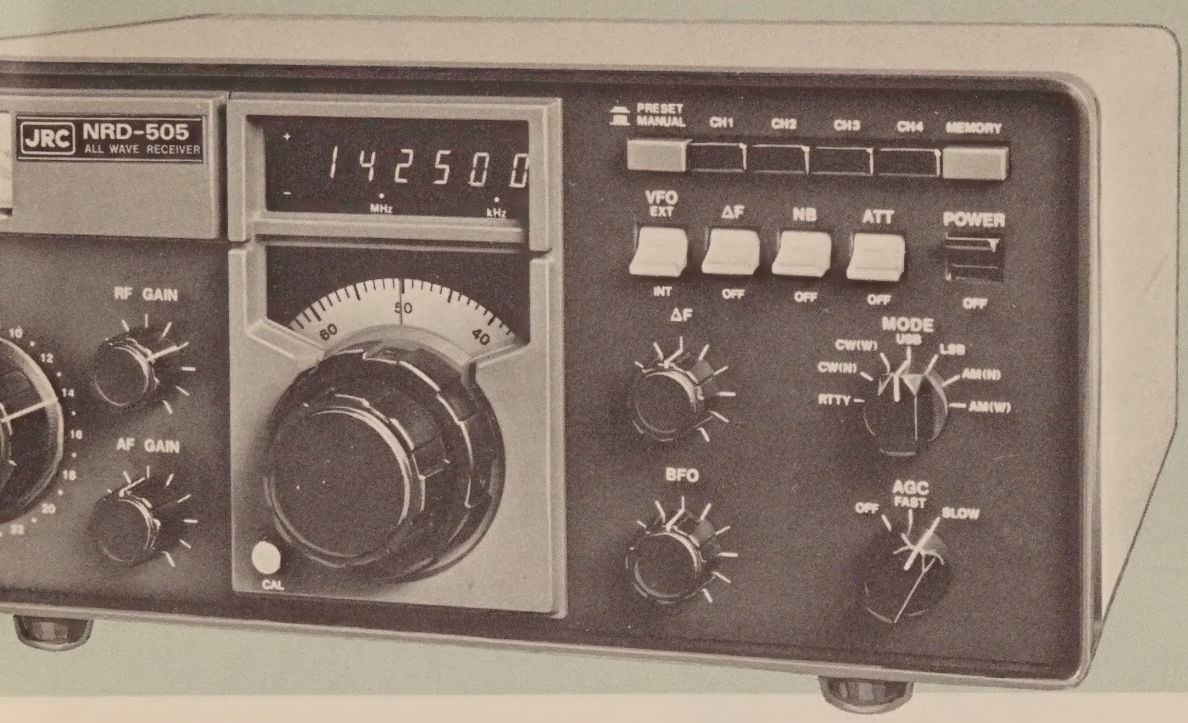
The advanced solid-state design of the NRD-505 uses the latest in devices with unusual density — 66 ICs, 18 FETs, 54 transistors, and over 100 diodes . . . Schottky TTL ICs and CMOS ICs contribute to its performance and low power consumption.

**Phase-Locked-Loop (PLL) Digital Synthesizer.** The NRD-505 local frequency is supplied from a digital synthesizer with a reference crystal oscillator and a permeability-tuned variable frequency oscillator for outstanding stability. The Synthesizer has its main components housed in an aluminum die casting and employs a drift-cancelling circuit and a full-scale double-loop PLL circuit. The VFO is backlash-free and has superb frequency linearity and temperature characteristics — drift is less than 100 Hz after warmup!

**Digital and Analog Frequency Readouts.** The receiver uses a frequency counter with 6 big red LEDs for digital readout in increments of 100 Hz and a 1 kHz-graduated dial for high accuracy and convenience.

**4 Programmable Memories.** More computer-like capability. Another "first," the NRD-505 uses CMOS random access non-volatile memory that stores up to 4 channels of frequencies for instant return to your favorite dial spots. Reprogramming is easily performed by means of the front panel push-buttons. No more tuning for your favorite stations — just push a button.

**All-Wave, All-Mode Reception.** Continuous coverage from 100 kHz to 30 MHz. Receive RTTY, CW, Upper Sideband, Lower Sideband, and AM modes. A variable beat frequency oscillator (BFO) and an AF active filter are built-in for CW reception — change the beat note to your preference — and there's an optional high-selectivity mechanical filter (0.6 kHz bandwidth) available for use in CW reception.




**Up-Conversion Double Superheterodyne.** The first IF is 70.455 MHz, the second is 455 kHz. The push-pull RF amplifier has an AGC-controlled PIN-diode RF attenuator and an RF gain control for complete control of sensitivity and freedom from overloading and cross-modulation. A built-in noise blanker eliminates impulse (auto ignition) noise. The RF amplifier uses low-noise, high power transistors, the first mixer uses FET's in a balanced configuration, a crystal filter is used in the first IF stage, and mechanical/ceramic filters in the second IF.

**Fast, Easy One-Hand Tuning.** The MHz Band Selector is stepped from 0 to 29 MHz in 1 MHz increments, and the double tuning knob (one turn is 100 kHz and 33 kHz respectively) assure speedy tuning. The input bandpass filter system is automatically switched to eliminate the need for any bothersome preselector tuning.

**Electronic Tuning, Electronic Switching.** All tuning and switching are electronically performed without any mechanical movement to assure fast response, high reliability, and long life.

**Complete Controls — Great Human Engineering.** All controls fall readily to hand, just where you expect them. Two-speed main tuning knob and "calibrate" control in the center just below the two frequency readouts. Bandswitch and RF and AF level controls grouped together. At the right upper panel, the Memory Recall and Memory Reprogram buttons. Just below them are the flip-type accessory operating switches (VFO external-if to be used with amateur radio transmitter etc., delta Tuning, Noise Blanker, and Attenuator) plus AC power switch. At the bottom lower right panel are the delta or incremental tuning control (for varying the receiver frequency slightly to accomodate any slightly off-frequency station), the BFO tuning for CW reception, the 7-position Mode Switch, and the Off-Fast-Slow Automatic Gain Control Switch. It should be noted that the NRD-505 is also the first consumer receiver to offer both wide and narrow selectivity selection for AM and CW stations. The lighted meter indicates received signal strength in standard S units. Front panel recorder and headphone jacks are provided.

**Elegant styling.** Restrained, quiet look of dark green-gray for the front panel, lighter gray for the dust-proof enclosure. Aluminum is used throughout with handsome die cast front panel reliefs. Speaker cabinet matches receiver height, color and styling.

*NRD-505 – an epoch-making short wave receiver, deserving of a place in the finest of listening posts.*

**NRD-505-R, receiver ..... $2275 plus shipping**
**NRD-505-M, memory ..... $125**
**NRD-505-CW, cw filter-narrow ..... $50**
**NRD-505-SP, speaker enclosure ..... $90**

**Primary Specifications: Range:** 100 kHz-30 MHz (30 bands in 1 MHz steps). **Modes:** RTTY, CW(N), CW(W), USB, LSB, AM(N), AM(W). **Sensitivity:** (S/N 10 dB) 1.6-30 MHz: less than 0.5 $\mu$V (CW/SSB), less than 2 $\mu$V (AM). 100-1600 kHz: less than 10 $\mu$V (CW/SSB), less than 40 $\mu$V (AM). Selectivity: At −6 dB: 6 kHz (AM-W), 2.1 kHz (RTTY/CW-W/SSB/AM-N), 0.6 kHz (CW-N), At −60 dB: 10 kHz or less (AM-W), 6 kHz or less (RTTY/CW-W/SSB/AM-N), 3 kHz or less (CW-N). **Image Rejection:** −70 dB or more. **IF Rejection:** −70 dB or more. **Input Z:** 50-75 ohms unbalanced. **AF Outputs:** to speaker: 1 watt or more, 4-8 ohms; to recorder/line: 1 mW or more. **Power:** 100/115/200/230 VAC, 50/60 Hz, 50 VA. **Size:** 340 mm w. x 140 mm h. x 300 mm deep. **Wt.:** approx 10 kg.

# Go-Anywhere SWL Portables

**P-4900**
**$479.00**

**P-2900**
**$219.50**

## Panasonic RF-4900 Receiver & Gilfer-Modified Selectivity— Really ahead of its time.

This Panasonic SWL receiver has the right features for fine performance . . . and Gilfer adds the modification to make it exceptional.

Features include a double-superheterodyne circuit with tuned-input RF amplifier for superior sensitivity, fast/slow tuning for ease and precision in finding those elusive stations, and 5-digit fluorescent readouts so you can tune in stations right down to the last 1 kHz.

And you'll hear stations across the world . . . AM, FM and eight shortwave bands that cover from 1.6 MHz to 30 MHz continuously . . . no gaps, no missed stations.

And you'll hear those stations with greater clarity, less interference, because Gilfer modifies the selectivity. In the new WIDE mode the selectivity is 4 kHz at −6 dB and 12 kHz at −40 dB, then a new narrow filter makes the NARROW mode less than 3 kHz wide at −6 dB and less than 10 kHz at −60 dB (as good as some of the best communications receivers). Your favorite stations seem to stand right out from the QRM around them for easy listening.

The RF-4900 also has all the controls and built-ins you need — calibration knob, BFO pitch control, RF Gain control, Automatic Noise Limiter, S/Battery Meter, Bass & Treble controls, 4" speaker, antenna and power jacks. And it's light enough (17¾ lbs) to go anywhere with batteries (not supplied). Even the new blue-green digits are readable in sunlight!

The world goes with you with the RF-4900.

**P-4900 $479.00 plus shipping**

## Panasonic RF-2900 Portable AC/Battery + 5 Bands + Digits

As good as the Panasonic RF-2800 was, the new RF-2900 is head and shoulders better!

The RF-2900 has a double superheterodyne circuit, fast/slow tuning for precise station selection, and 5-digit (kHz on SW/AM, MHz on FM) readouts for needlepoint accuracy.

Coverage includes AM, FM and three shortwave bands ranging from 3.2 MHz to 30 MHz without gaps. And the selectivity is great so the listening is great . . . the new ceramic IF filter measures just 4 kHz wide at −6 dB and 12 kHz at −40 dB in the WIDE mode; in the NARROW mode, the curve measures 4 kHz at −6 dB and just 14 kHz at −60 dB! That's selectivity that counts when the bands are rough on reception.

Of course the RF-2900 has all the controls and built-ins you need . . . RF Gain, BFO Pitch Control for SSB listening, S/Battery Meter, built-in antennas for all bands, separate Bass and Treble controls, 4" speaker, dial light, dial hood, plus jacks for about everything including recorder. Weighs just 8 lbs, 10 oz. and boasts that great looking military styling. Great price, too.

**P-2900 $219.50 plus shipping**

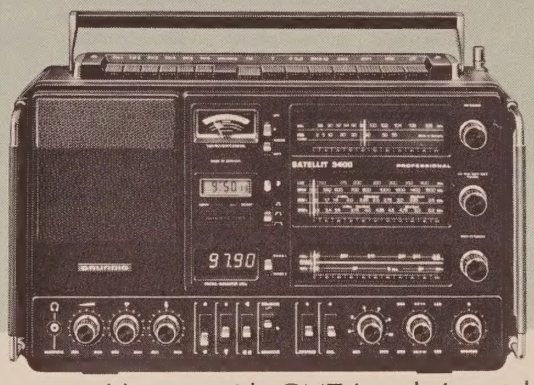
## Panasonic RF-2600 Portable . . . A Bargain In Mobile SWLing.

When it comes to SWL portable, the RF-2600 is hard to beat for its price.

$199.50 buys a bunch of fine features, great performance, and super appearance . . . 5 bands (AM, FM, plus 4 overlapping shortwave bands covering from 3.8 to 28.5 MHz) in a double conversion superhet (less images) circuit with sensitivity to pull in your favorite stations wher-

**P-2600**
**$189.50**

**6700 W $367.00**



**S-3400**
**$975.00**

ever they are, selectivity to rival communications receivers, both analog and digital direct readouts, and a sleek, sophisticated cabinet.

The RF-2600 selectivity curves, both WIDE and NARROW, exhibit fine characteristics similar to its more costly companion RF-2900 to provide clear reception on every band even when heavy QRM is a fact that prevents other receivers from delivering listenable signals.

Readouts are the drum-type analog dial and 5 bright blue-green digits for easy, accurate tuning down to 1 kHz, and the tuning is easy, too, with the spinner-type knob and its associated logging scale.

The styling is restrained, without all the bells and whistles, looking less like WWII and more like elegant. We like it.

And then there's that hard-to-beat price!

**P-2600 $189.50 plus shipping**

## Sony ICF-6700W Portable

At first glance one would think this is a standard fixed base SWL receiver — it has the right features, good size, and handsome styling — but it goes anywhere you want to listen.

Five Bands — AM broadcast (530-1650 kHz), FM broadcast (87.5-108 MHz), and three shortwave bands (1.6-10 MHz, 11.5-20 MHz, and 20-30 MHz).

Dual Readouts — slide rule dial scales plus digital LED readouts that operate on all bands.

Circuitry uses 5 FETs, 32 transistors, and 19 diodes powered by 6 "D" cells or built-in 117 VAC supply. Dual conversion design with crystal-controlled oscillator. FET RF amplifier with RF gain control for excellent sensitivity (as low as 0.63 $\mu$V on shortwave) and freedom from images. Built-in ferrite rod antenna plus telescopic antenna plus switched-in connectors.

Handsome black styling includes a fold-down world map with GMT-Local time table and an azimuthal equidistant projection to help achieve best antenna orientation.

**6700 W $367.00 plus shipping**

## Grundig "Satellit" Portable

Grundig stands for the very best in precision receivers and Satellit is their finest portable. 21 bands cover 18 SW bands from 160 to 10 meters, plus FM, AM, and LW (150-400 kHz in modes AM, SSB (USB & LSB), and CW. Frequency display is both digital and analog with sliderule dials and 5 LEDs — great for accurate tuning. And the removable 4-digit LCD 24 hour quartz clock assures making broadcast schedules on time. The separate FM tuner has 6 programmable channels for your favorite stations plus its own tuning control and dial. The low frequencies, LW, MW, standard broadcast and SW1 & 2 (1.6-5.2 MHz), also have their own tuning control and dial. The remaining 8 tuning ranges, covering 5.0-30 MHz in 16 bands, have a drum tuner with gold-plated contacts for long life — its switch is mounted on the right side, the dial and tuning control in front, thus putting all three dials and controls stacked at the right — easy to operate, easy to read.

Technically, the Satellit 3400 is superior in all respects. The double-conversion circuitry is solid-state, uses crystal filter 1st IF, tuned preselector for peak sensitivity, 9 ICs, 51 transistors, 23 diodes, and all the controls one could wish for.

The sound system of the Satellit 3400 is markedly superior, boasting 2 speakers (low/medium frequency speaker plus switchable tweeter) with a 7.5 watt output.

Operation is from 220/240, 110/117 VAC or from external 12 VDC (car or boat battery), or built-in battery supply.

**S-3400 $975.00 plus shipping**

# Shortwave Performance Accessories

**C-10 $57.50**

**M-200E $525.00**

## Here's How To Update That Older SWL Receiver — Add The GILFER C-10 Calibrator For Better Dial Accuracy.

Your dial accuracy problems are solved when you add the GILFER C-10 to your DX-160, HQ-180, etc. Attach this versatile device to your receiver's antenna terminals and it will "broadcast" harmonics throughout every shortwave band. And you can select the frequency of harmonics you wish — every 10, 25, 50, 100 or 1000 kHz. Through interpolation, "spot" any frequency you want using the logging scale of your receiver dial. And to help you identify the harmonics, a switchable "Gate" circuit pulses the output signals three times every second.

Electronically, the C-10 uses 3 CMOS ICs and a transistor harmonic amplifier. The special switching network and circuitry prevents "break-thru" of unwanted harmonics (for example, the 10 kHz harmonics don't appear as weak signals when you only want the 50 kHz harmonics).

The C-10 is battery powered (battery supplied). Its handsome housing is 4 × 2½ × 6, finished in egg-shell white with walnut grain top and sides.

Put an end to receiver calibration problems with the C-10. **C-10 $57.50**

## New Info-Tech 3-Mode Converter Adds Video Display Capability To CW and RTTY Reception.

If you've ever wondered what the CW and RTTY signals are saying, here's a way to find out. The M-200E converter uses microprocessor technology to convert Morse, RTTY and ASCII to video and hardcopy printout capability (just add a video monitor and/or serial ASCII printer — the monitor for visual display, the printer for hardcopy). Your present receiver is sufficient if it has a stable BFO.

For CW conversion, the M-200E features automatic speed and word space adjustment (speeds from 5-55 wpm, higher with internal adjustment). LED "lock light" aids in tuning and "fine tune" control on rear panel is provided for use with non-adjustable BFOs. Phase-locked-loop "front end" and sophisticated software locks out noise while maintaining sensitivity.

For RTTY, the M-200E has selectable speeds of 60, 66, 75 & 100 wpm, selectable unshift on space, selectable video indication of incoming speed, automatic CR/LF, automatic threshold control, switched limiter, and built-in three shift active filter demodulator standard tone set (mark = 2125 Hz), optional tone set (mark = 1275 Hz), and ASCII output (loop or RS232) at rear panel jack for printer. For ASCII operation, the M-200E has a fixed speed of 110 baud, decodes standard ASCII code, and uses same demodulator as RTTY section.

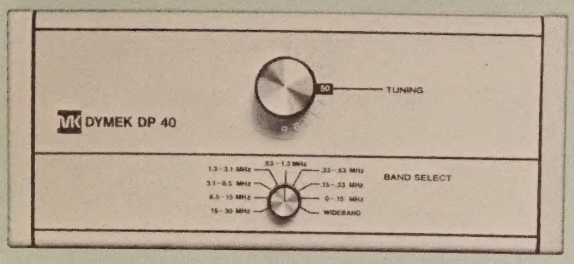
Video output is composite 5 × 7 dot matrix, with 16 lines, 72 characters per line (uses 2513 character generator for 64 character ASCII display). The display "scrolls" from the bottom, adding a new line at the bottom and deleting the top line as new information is entered.

A fascinating addition to SWLing.

**M-200E $525.00**

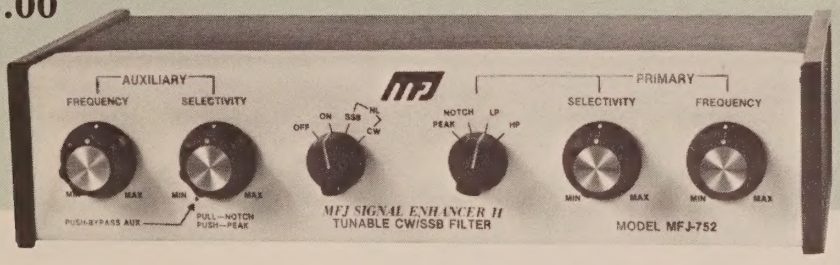
We recommend and stock the Sanyo VM-4092 video monitor with your M-200E Converter. Special price with M-200E is $190.00, plus shipping.

# Receiving Accessories To Make Listening More Versatile



**DP40 $125.00**

**DA100 $140.00**




**MFJ-752 $79.95**

## McKay Dymek RF Preselector.

In an age of wideband receivers, it may seem contrary to technology to add a preselector, but often it is necessary such as in close proximity to high power transmitters to eliminate cross-modulation interference and desensitization.

The McKay Dymek DP40 is a passive device, that is non-amplified, which shapes the input selectivity curve to eliminate undesirable signals at your location. Its nine band-select positions provide a five-element lowpass filter for 0 to 0.15 MHz, dual-track tuned circuits for 0.15 to 30 MHz, and a wideband bypass position to remove the preselector from the antenna circuit when not needed without the necessity of disconnecting the device.

Typical performance figures are: at −3 dB, bandwidth is as narrow as 10 kHz at 150 kHz to as wide as 2.2 MHz at 30 MHz with insertion losses from 8.5 dB at 150 kHz to 2.5 dB at 30 MHz on 50 ohm systems. **DP40 $125.00**

## McKay Dymek All Wave Antenna.

If your location just simply prevents your using a normal type of long-wire or other SWL antenna, this interesting active antenna can make it possible for you to listen to the SWL world.

Just 4'-8" tall, but with performance that makes it seem much larger, the DA100 antenna amplifier and element is housed in a weather-proof cast aluminum box with hardware for easy outdoor mounting with an inconspicuousness that is hard to beat and a reception capability rivaling long wires (even exceeding them at 500 kHz).

The indoor unit provides controls for matching to any receiver with a 50, 100, or 500 ohm input and for selecting the degree of attenuation (0, 10, 20 dB) that may be necessary to prevent receiver overload by strong nearby stations. Operates on 110-120, or 220-240 VAC, 50-60 Hz. Comes complete with 50' of RG58 cable (length may be extended if needed). **DA100 $140.00**

## The New MFJ-752 Signal Enhancer II Gives You Real Signal Processing Capability.

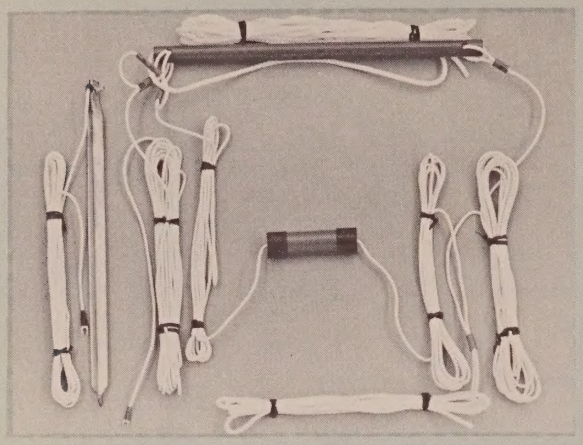
The MFJ-752 is a **dual tunable active filter** system that belongs at your SWL receiving post. It lets you peak, notch, lowpass or highpass, audio signals for maximum readability.

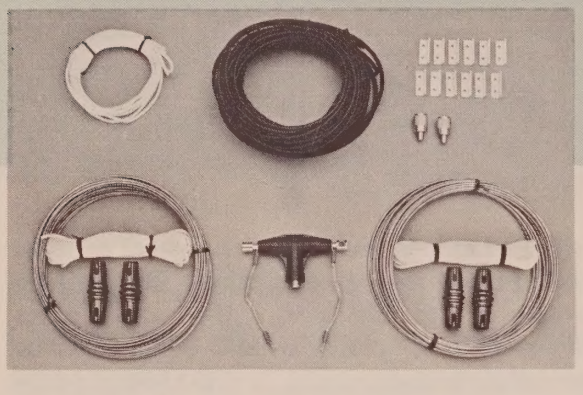
For example, you can select the optimum Primary filter mode for an SSB signal, zero in with the linear frequency control, adjust bandwidth from flat (wide) to 40 Hz (narrow) for best response, and then adjust the Auxiliary filter to tightly notch out an interfering whistle or sharply peak the desired signal. On CW signals, you can peak both Primary and Auxiliary filters for narrow bandwidth for a steep skirted curve that's outstanding, or use the Auxiliary filter to notch out interfering signals.

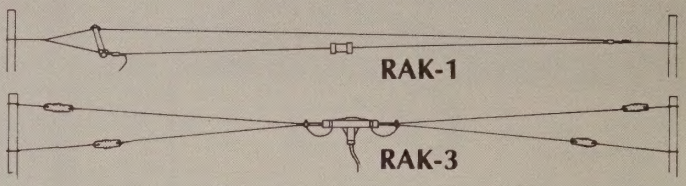
Both filters tune from 300 to 3000 Hz, bandwidth is variable down to 40 Hz, notch depth goes down to 70 dB, and output is constant as bandwidth is varied.

The switchable noise limiter wipes out impulse noise, the trough clipper removes background noise, and the simulated stereo feature for CW lets your ears and brain reject QRM. Works with any receiver, plugs into the phone jack, has it's own speaker and phone jacks, provides 2-watt drive for speaker, phone disables speaker, "off" bypasses filter, has inputs for 2 receivers. Powered by 110VAC or 9-18 VDC, 300 ma. 10×2×6 inches. **MFJ-752 $79.95**

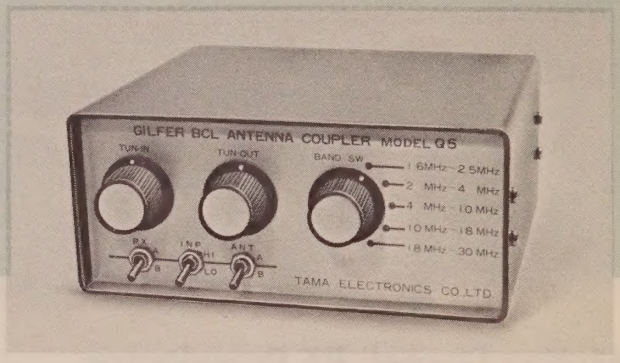
# Antennas And Couplers Designed Especially for Shortwave Reception








**RAK-1 $24.75**




**Q-5 $52.50**

**RAK-3 $58.50**

## An Outdoor Antenna In Only 20 to 22 Feet of Space: "RAK Listener-1."

This loaded and folded flattop antenna has much more "capture effect" than seems possible for its size. Its secret is the loading coil and the folded-back section which also forms the lead-in (the 7 meters long lead-in must not be lengthened or shortened or the antenna will not work properly). The antenna must be mounted horizontally and about 6 meters high for best operation.

Comes complete with white plastic covered antenna wire, loading coil, red plastic spreader bar, white nylon rope, and ground lead and stake; assembled, ready to install. **RAK-1 $24.75**

## At Last, The SWL Antenna That's Been Unavailable Is Here Again: "The Double Dipole RAK-3"

If there is an "ultimate" shortwave antenna, many consider it to be the "double dipole." And yet, it hasn't been available to the SWL for over 20 years. Now RAK brings it back in a really superior package.

As the name implies, the double dipole is two dipoles of different resonances feeding a single coaxial cable. Through careful selection of the lengths of the two dipoles, plus the angular spacing between them, the impedance can be held reasonably constant (50-100 ohms) from 3 to 30 MHz.

The "RAK Listener-3" is a heavy-duty double dipole with an overall air space length of 21 meters (64'). The second dipole is fanned away between 10 and 25 degrees and is 13 meters (42') long. The complete kit, including special aluminum alloy 3mm wire, molded, sealed center insulator, end insulators, 50' of coax cable, connectors, hardware, and white nylon supporting ropes, is designed for permanent mounting and will withstand the worst types of weather. Support poles or trees are required and the top dipole should be at least 40' above ground.

It's the only one we know of and you'll like the way it works. **RAK-3 $58.50**

## Make Your Indoor or Outdoor Wire Antenna Work Better With The New GILFER Q-5 Tuner.

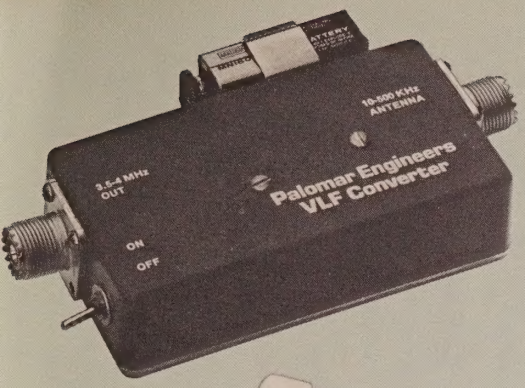
Every antenna works better when it is matched in impedance to the receiver you use. And that's what happens with the new GILFER Q-5 Antenna Tuner installed in your listening post.

The Q-5 covers 1.6 to 30 MHz in 5 switch-selected steps with a pi-network design that has the versatility to work with two antennas and two receivers at the same time! It will even match high or low impedance receiver inputs.

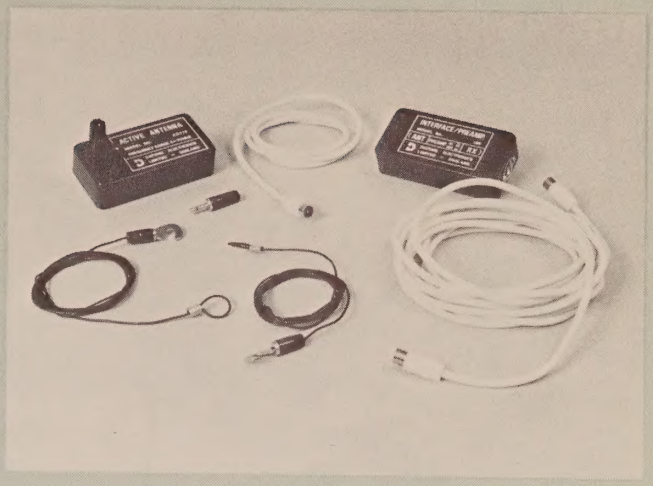
DISCONTINUED

Comes assembled, ready to use, in attractive metal cabinet with operating controls and switches on the front panel and easy-to-use RCA-type phono and terminal strip connectors.

A wire antenna is more than just a piece of wire when you connect it to the GILFER Q-5 — it's a receiving system that works! **Q-5 $52.50**




**VLF-1**
**$56.50**



**AD-170 $87.00**

**LA-1 Loop Amplifier $69.00;**
**Plug-In Loops $49.00 ea.**

## Open Up A Whole New World of Listening With This Palomar Very-Low-Frequency (VLF) Converter.

The VLF band extends from 10 to 500 kHz and is not received by most amateur band and shortwave receivers. With the VLF converter, you'll hear the 1750 meter band where one-watt transmitters can be used without a license. It also covers navigation radiobeacons, standard frequency broadcasts, ship-to-shore, and the low frequency European broadcast band. All signals are converted to 80 meters so you can tune them in on any shortwave receiver covering 3.5 to 4 MHz. (normal 80 meter signals are blocked by the converter during VLF reception).

The converter has a crystal-controlled oscillator for frequency accuracy, low noise RF amplifier for high sensitivity, and a double-balanced mixer for maximum freedom from strong local signal interference. A multi-pole filter greatly reduces signals in the standard broadcast band and cuts IF feed-through from 80 meter amateur signals. Power supplied by 9v battery.

**VLF-1 $56.50**

## If Noise and Interfering Signals Are Wiping Out Your DXing, Add This Palomar Amplified Loop Antenna.

The Palomar Loop Antenna is small enough to use right at your receiving desk and it works fine in most wood frame buildings. The FET Amplifier adds 20 dB of gain to really put some zip to your receiver's sensitivity, and the amplifier housing serves as a base for the plug-in loop antennas.

To use, just peak the loop response for the operating frequency by adjusting the tuning control, rotate the loop for minimum interference, and tilt the loop as required for the best null.

Convenient size, the amplifier measures 7¼" × 6" × 2¼" and is powered by a standard 9v transistor radio battery, or the 9v converter input especially fitted by GILFER. The loop antenna is 8" long by 1½" in diameter and stands 6" above the amplifier housing.

Plug-in loop antennas are available for 1600-5000 kHz (160/80 M), 550-1600 kHz (broadcast band), 150-550 kHz (VLF band), and for WWVB and Omega frequencies.

Sharpen up your listening and get rid of the interference with the Palomar Loop Antenna.

**LA-1 Loop Amplifier $69.00;**
**Plug-In Loops $49.00 ea. (specify band)**

## New Indoor Active Antenna

Only 3 meters in length to fit anywhere indoors — attic, picture window, etc. Covers 60 kHz to 70 Mhz. Switchable 12 or 24 dB gain gives more receivers more performance. Matches 50 ohm (nominal) inputs. Flat frequency response minimizes inter-mod. effects. Dipole configuration gives choice of polarization and useful directivity effect. No antenna tuner needed.

The secret of all this performance is in the "electronic balun" — an amplifier using field effect and bipolar transistor circuitry. 12v power is supplied by the Interface Unit (converter supplied). The 4 meter coax feed line supplied may be extended in length as required. This is the answer to indoor "gain" antennas. Specify type of antenna terminals required: spade lugs, RCA phono, or PL-259 coax.

**AD-170 and converter $87.00**

# Headphones — For Easier Listening.

COM-2
$21.95

HTC-2
$21.95

YH-55
$16.00

C1210
$28.30

## Superex COM-2 High Impedance.

When it comes to comfort, universality, and value, the Superex COM-2 headphones are hard to beat. These handsome phones are *light weight* — 13 ounces. The cushioned earcups shut out extraneous noise yet fit lightly on the head. And the connecting cord is the longest (7') of any earphones we've seen (usually 5') for more freedom of movement.

The moving coil transducers of the COM-2 phones have 1000 ohms impedance to permit using them on low, medium, or high impedance receivers. And they sound good, too, non-fatiguing with a high cut-off at about 6000 Hz and a low cut-off of 100 Hz that rejects hum noise. Standard ¼" plug.

Best of all, they are low cost. **COM-2 $21.95**

## Telex "Twinset" — Perfect For Eyeglass Wearers.

Weighing only 1.6 oz., the Twinset is a favorite of those of us who wear glasses; the dual magnetic transducers rest on your temples away from your ears. Sound is channeled into the ear by an adjustable tube mounted on a ball and socket joint; swing one tube away for listening to conversation without removing the headset. Low impedance (3-20 ohms) with tailored response for maximum intelligibility; includes 60" cable and standard ¼" plug. **HTC-2 $21.95**

## NEW Yaesu YH-55 Headphones.

If you use the Yaesu FRG-7 receiver, you'll want these headphones — they're an exact match for the receiver's impedance. And these new phones are low impedance, so they'll work with most receivers. And they are **comfortable!** Plastic earcup padding and fully adjustable — you can wear them for hours without realizing they're on your head. The sound is great, too. Not too loud, not too soft, not too harsh, not bassy — just-right tonal quality for non-fatiguing listening. And they are a great buy! **YH-55 $16.00**

## Telex C-1210 Low Impedance.

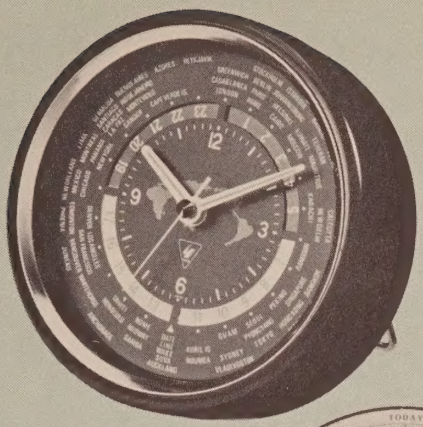
If you want the best possible low impedance match for your SWL receiver headphone jack, choose the Telex C-1210. Their nominal impedance is 16 ohms, but they match 3.2 to 20 ohm outputs with their dual moving-coil dynamic transducers. Comfortable, too, with the "squared" shape that practically encases your ears in their foam-filled cushions. Also reduces ambient noise penetration and concentrates signal output. Earcushions are removable for cleaning. 5' cord, ¼" standard plug. **C1210 $28.30**

## Headband Cushions.

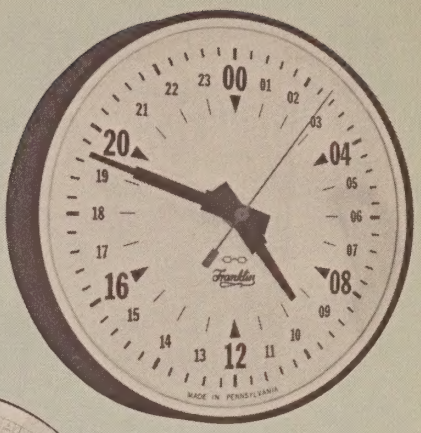
Like TV cameramen wear. Fit Telex C-1210. Snap on and enjoy real comfort.

**HC-1 $2.25**

# World Time Clocks



QTR-24
$33.95



FE-10 $25.95

HM-3
$39.00

WTC-1
$1
with purchase

## Howard Miller World Time Desk Clock — Elegant Accuracy.

Designed by the famous Howard Miller, this clock presents an image that can only be termed sophisticated elegance. And its appearance is surpassed only by its accurate information. It gives the time simultaneously and automatically in fifty-three key locations around the world. It has a sweep second hand and a rotating disc which indicates the correct time, daylight and nighttime hours, in twenty-four hour time for all indicated locations, and it shows the International Date Line. The movement is battery operated (standard flashlight battery, not supplied). The metal dial is covered by a shatterproof crystal and surrounded by a chrome metal bezel. The case is black with a rosewood grained finish; 8½"h × 6⅜"w × 3⅛"d. **HM-3 $39.00**

## Yaesu World Time Clock — For Wall or Desk.

To complement your Yaesu FRG-7 receiver, there's nothing quite so attractive or useful as this Yaesu clock. Tells time at a glance in numerous cities and countries around the world, is easily adjusted to WWV/CHU time, and it maintains its accuracy over long periods of time. Battery operated, there is an adjustment should its variation from week to week be more than a few seconds. It has a sweep second hand and a rotating time disc to show the time, day and night, for all indicated locations printed around its dial. The black case with chrome metal bezel measures just under 6" in diameter; a wire bail is provided to permit mounting the clock on your desk or receiver or hanging it on the wall. Battery supplied. **QTR-24 $33.95**

DISCONTINUED

## Franklin 24 Hour GMT Clock Eliminates All The Converting.

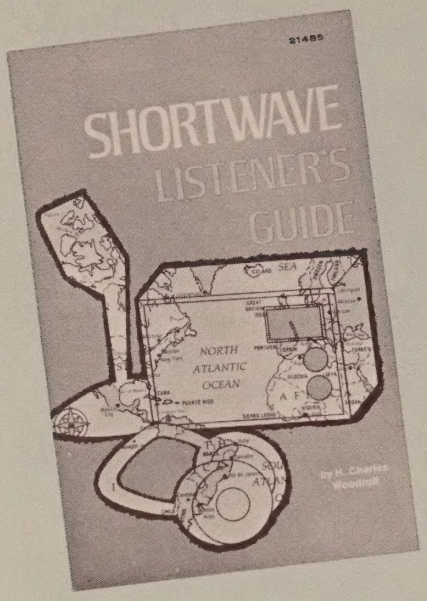
With much of the world broadcasting, and WWV/WWVH on 24 hour UT time, here's one clock that takes all the mental calculations out of telling your time in the same manner. The Franklin 24-hour clocks are 117 VAC powered (no batteries to fool with), and run for months with high accuracy (they're synchronized with the 60 Hz frequency of the power line). Read it like any other clock, sweep second hand, long hand for minutes, short hand for hours; twelve is noon, thirteen is one o'clock, etc. White face plate. And the 10" clock is readable from 10 to 12 feet. **FE-10 $25.95**

## Find The Time Anywhere With The World Time Computer . . . Only $1 With Any Purchase!

This handy little gadget is such a beautifully simple solution to figuring out the time at any place in the world that it is amazing. Two imprinted cardboard wheels are fastened at the middle point with a little tab to shift the top wheel where you want it. The perimeter of the bottom wheel is printed with all the hours of today, yesterday and tomorrow. The top wheel has a world map that is divided into the 24 time zones. Just shift the top wheel to the time today at your location and the correct time and day is automatically shown for anywhere else in the world. Nifty. And you can't beat the price. $2 value.

**WTC-1 $1 with purchase**

**Gift Certificates Available**




SLG-7 $5.45

GL-12 $22.95

ACP-2 $6.45

## For Convenient Reference — The "ShortWave Listener's Guide."

The seventh edition of this handy book, by H. Charles Woodruff, makes things even easier for international shortwave broadcast listeners. Three convenient formats simplify schedule information into quick, easy-to-use tabulation. One list has all shortwave broadcasters listed by country — with information on call signs, station announcements and slogans, interval signals, what frequencies are most likely to be in use and when. Another list is arranged by frequency, and another by country and city. Plus there is an additional list of News Broadcasts and a special text section in the front of the book dealing with ionospheric predictions for 1979. And it's a good buy at this low price. 144 pages. **SLG-7 $5.45**

## "The Antenna Construction Handbook"

Every good shortwave receiver deserves to be connected to a good antenna. Rather than use a makeshift antenna why not erect an antenna you customize to suit your needs? Here's a book that spells out how to design, cut and build antennas to capture that last microvolt of DX signal — whether you're an SWL, ham or CB'er. Written in clear-cut careful detail by Rufus P. Turner, this book eliminates all mathematical formulas and concentrates on practical information: length and height of wire antennas, lead-ins, receiver connections, grounding and lightning protection, directional effects, etc. There are suggestions on tuning your receiving antenna, building a helically-wound vertical for all-band coverage, using window screens, etc. A very valuable text with emphasis on the practical. 230 pages.

**ACP-2 $6.45**

## The World At A Glance — The Beautiful 12" Replogle Raised Relief Globe.

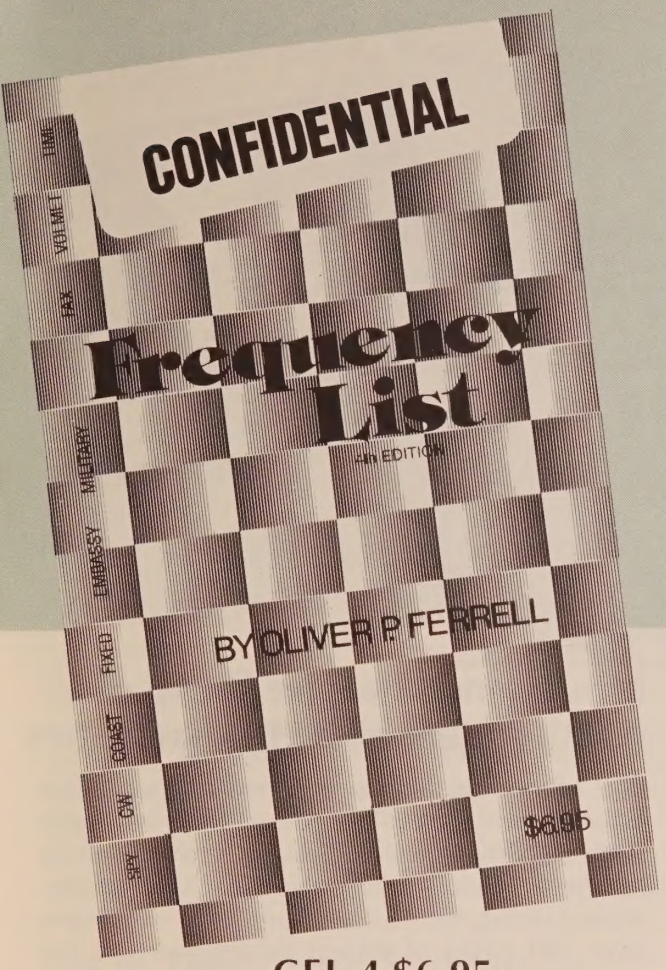
Whatever country you are listening to, this handsome "World Nations" globe makes finding it much easier. First of all, vividly contrasting colors are used for each country, then the topography stands out in raised relief for realism of terrain, and lastly, the globe is accurate and up-to-date with thousands of place names (continents, countries, cities, islands) to aid in location. It even illustrates the flow and direction of warm and cold ocean currents! The globe rests "free" in an attractive translucent blue molded base for easy handling — the base educators recommend for studying ease. Height in stand is 14½". Included is a 32 page full color "Story of the Globe" handbook. Put this handsome globe at your listening post to make SWLing just that much more interesting. Great for "visualizing" Great Circle paths to DX stations from your receiver (twist globe upright, insert small pin and use colored thread for GC path). **GL-12 $22.95**

## Dust Covers for FRG-7, FRG-7000, and NRD-505 Receivers . . . only $5.45

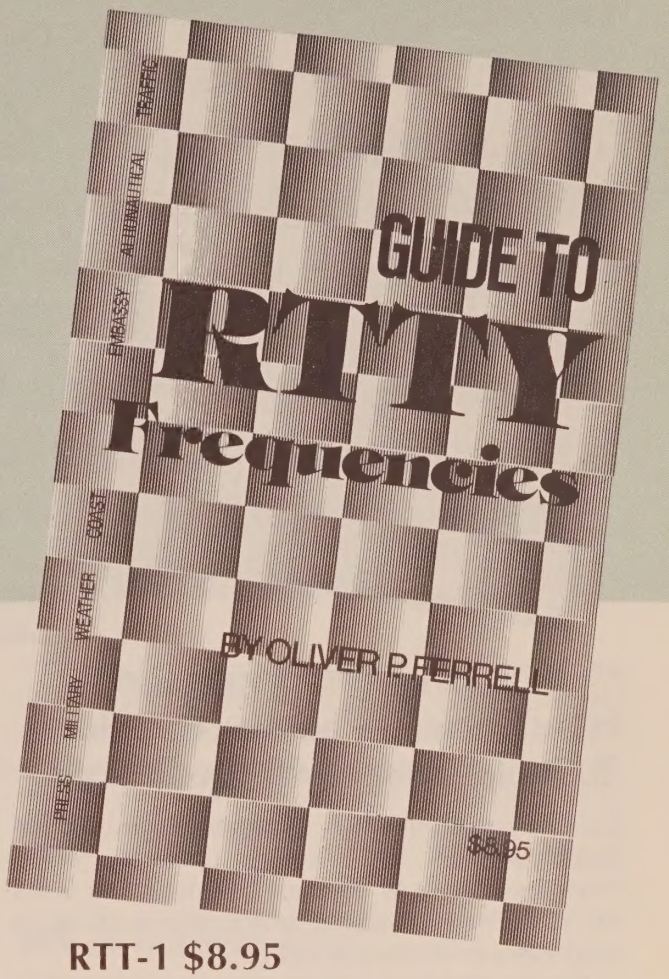
Protect your equipment and your investment with these handsome heavy gauge vinyl dust covers. Protects the finish, keeps the knobs and meters dust-free, and keeps the dust out of the inside chassis. Each cover is custom cut to fit, machine stitched, made of embossed vinyl. Good idea that saves money. Specify model of receiver.

**CC-1 $5.45**

# Unique Books That Explain Those Mystery Signals




**CFL-4 $6.95**




**RTT-1 $8.95**

## "Confidential Frequency List" By O.P. Ferrell.

Here's your chance to "come in out of the cold" in your SWL monitoring . . . a book that lists the little-known world of sub rosa broadcasts the world over!

Compiled by O.P. Ferrell of GILFER, from a vast mix of sources including Federal, International, dozens of volunteer SWLers that monitor between the broadcast bands (and others we can't mention) this fascinating 104-page book not only lists stations by frequency (approx. 4500), but also by call sign (if there is one!), and location. It also indicates the classification of the stations (Fixed, Coastal, Embassy, FAX, Military, Aeronautical, Time Signals, VOLMET, Weather, Press, Feeders, INTERPOL, CW Traffic, etc.), power (if known), and pertinent remarks about hours and schedule.

The book also spells out the internationally agreed upon spectrum devoted to Mobile, Fixed, Broadcasting, etc.

For interesting listening, tune in the fascinating variety broadcasts from 4 to 26 MHz. It might be a sea diaster, an INTERPOL broadcast about drug smugglers, or some of the rarest DX locations you can imagine.

**CFL-4 $6.95**

## "Guide to RTTY Frequencies" — The World of Radio Teletype Broadcasting.

The material for this interesting new book was developed by years of monitoring RTTY broadcasts by O.P. Ferrell of GILFER and other secret volunteer monitors throughout the world.

Besides listing nearly 2500 RTTY stations the world over, the book also tells how to identify transmissions via RTTY that are in Arabic and also in Cyrillic (Russian). It gives information on how to read weather codes (where they originate and what areas they cover), and it includes a table of "Z" codes used in RTTY broadcasts. Listings will include frequency, call signs, location, power, speed/shift, whether its running normal upright or inverted, news service (when it applies) and schedule. Covers Aeronautical, Weather, Press, Embassy, and many point-to-point nets.

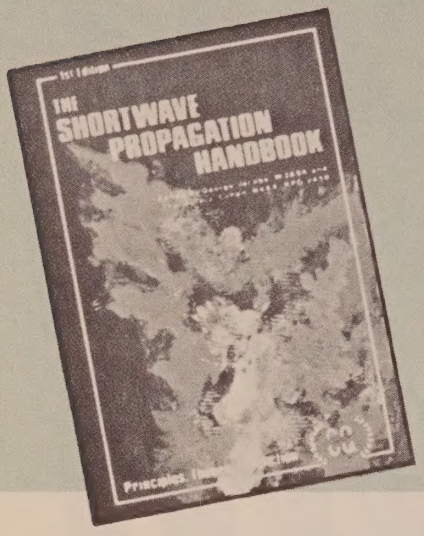
Here are 96 pages of really different and almost impossible to find information on the intriguing RTTY world . . . to add to your SWL world.

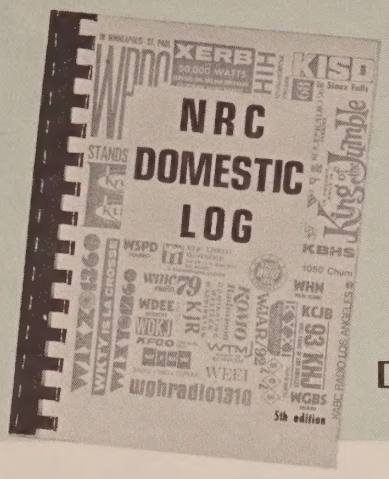
To be published in October 1979 **RTT-1 $8.95**

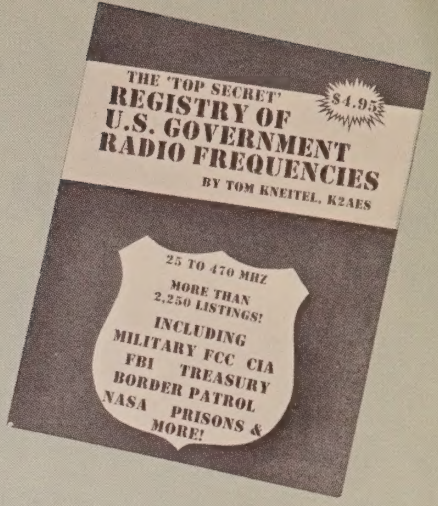
COMBINATION OFFER
Both CON-4 and RTT-1 mailed same day to same address for only $14.50 (save $1.40).

# Special-Interest Listening Guides

**PRO-1 $7.50**




**RUS-1 $4.95**

**DOM-5 $7.50**

## "The Shortwave Propagation Handbook" — Shows You How To Make Your Own Predictions.

Two leading authorities on propagation, George Jacobs, W3ASK, and Theodore J. Cohen, N4XX, have teamed up to produce this definitive work on a fascinating subject which affects all of us who listen to shortwave radio.

For the first time, propagation is explained in simple language that the average reader can understand fully and put to use to produce his own propagation data. For example: a SWL can listen to the 18-minute after-the-hour broadcasts from WWV and, using that information and material from this book, make his own predictions for the next 24 hours.

This is a "must" book for every radio amateur, shortwave listener, and others using the shortwave radio spectrum.

**PRO-1 $7.50**

## "Mail-A-Prop" — the Shortwave Propagation Bi-Weekly News Letter.

If you are serious about shortwave DXing and want to know the best time to tune in, you'll find the answers in this interesting bi-weekly newsletter.

The service predicts DX conditions for the various bands on a day-to-day basis with surprisingly high accuracy. Also included are tips on short-skip, sunspot activity, ionospheric storms, and unusual band openings. Mailed via 1st Class. Trial 2-month subscription is $5.00. Sample MAIL-A-PROP on request (SASE please).

**MP-79 $24.00**

## Most comprehensive listing of North American AM broadcasters

The adage, "it takes one to know one" gets a full-data verification from the National Radio Club's "NRC DOMESTIC LOG." Assembled by the leading club devoted just to AM/medium-wave DX'ing, the 1979-80 (5th) edition contains over 200 pages of station information you just can't find elsewhere. Listing all of the broadcasting channels from 540 to 1600 kHz, each station is detailed by callsign, transmitter location and mailing address, power and antenna pattern, hours of operation, network affiliation, programming, etc. Every broadcaster in Canada and the USA is analyzed and with the reverse listing (callsign to frequency) you need this book anytime you hear an AM DX station. Spiral-bound.

**DOM-5 $7.50**

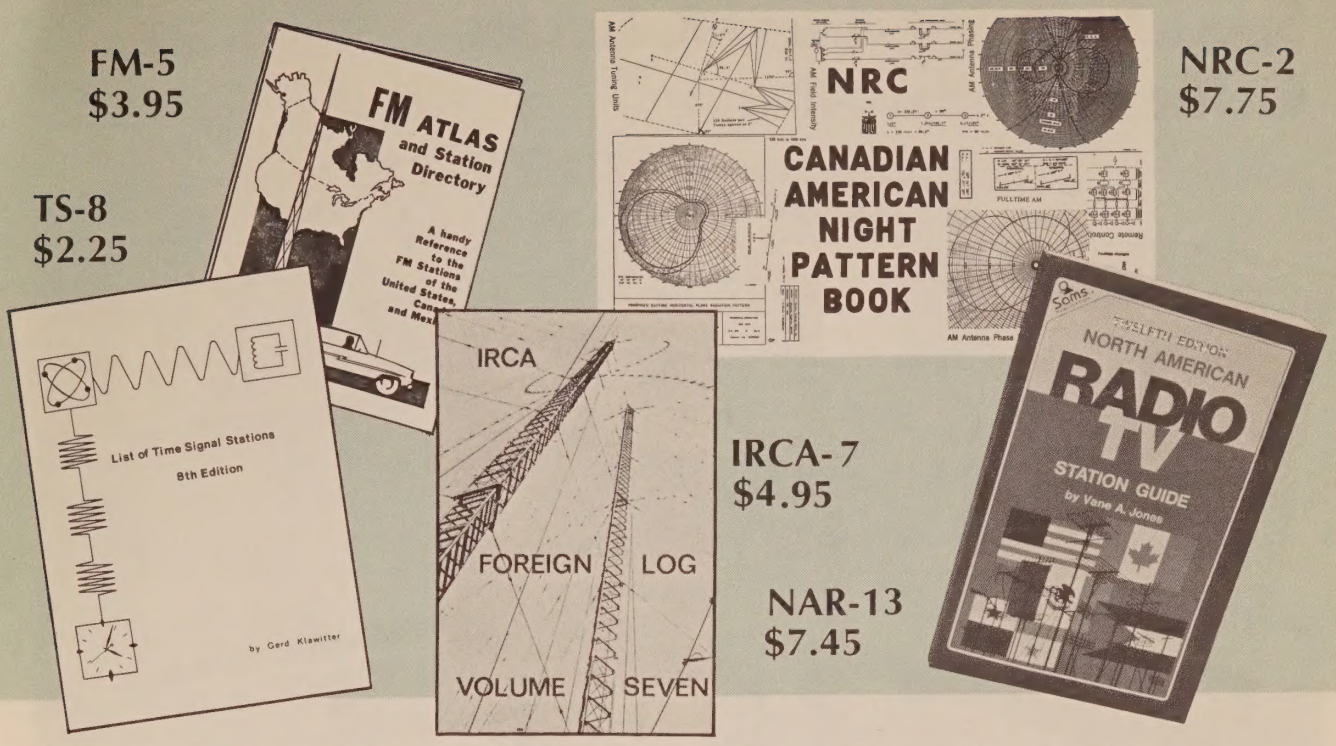
## The "Top Secret" Registry of U.S. Government Radio Frequencies

Here's the answer to those strange broadcasts you've probably heard on your VHF/UHF scanner. They're government communications... from the Armed Forces, FBI, Treasury, CIA, prisons, Secret Service, FCC, Customs, NASA, the UN, Army Engineers, U.S. Marshals, various other federal departments such as Fish & Wildlife, National Parks, Department of Agriculture, and more!

This unusual book lists more than 2,250 frequencies used by U.S. Government Agencies in the 25 to 470 MHz bands. Compiled from years of monitoring by Tom Kneitel, this valuable book not only gives you all the frequencies, but also explains the mystique of the special "protected" bands and frequencies, how to monitor them, equipment tips and techniques, QSLs (when to ask for them, when not to), coded



**Gift Certificates Available**




identifications, a discussion of those strange "split" decimal frequencies, transmission modes, frequency clusters, switching, and hopping. Just the info you need to get the most from your programmable scanner. The book is in an easy-to-use 8½ × 11 size with room for marginal notes of your own and other information. **RUS-1 $4.95**

## List of Time Signal Stations — Latest Edition — Invaluable.

Written and assembled by Gerd Klawitter, this specialized little booklet tells you everything you've wanted to know about time signals and the stations throughout the world which broadcast them. The specialist SWL'er, ham operator, lab worker, etc. will find this information most valuable because it's the only complete compilation of time signal stations, their frequencies, hours of operation, and most important, the particular format through which they broadcast time ticks. Like a road map to understanding what you hear, the book diagrams each of the many different tick arrangements and how to use them. Pictures of many of the transmitting stations are also included. **TS-8 $2.25**

## FM Atlas and Station Directory.

If your car has FM, if you like the better sound of FM, if you go DXing after far-away FM stations, this book is just what you need.

The fifth edition of this handy guide to FM lists over 4,000 stations on the air in the U.S. and Canada. Listings are by geography and frequency. Maps by state and large cities show town names and station call letters and frequencies. Other lists include those stations using translators to extend coverage. Detailed listings show programming type (rock, soul, classical etc.), channel number and class of station, antenna height, polarization, primary and secondary coverage radius, effective power, SCA, network, etc. A handy front section explains programming and operational trends, how to buy an FM receiver or car radio, how to get rid of ignition noise, etc. If it's FM, it's in this book. **FM-5 $3.95**

## IRCA Foreign Log.

A popular column in the IRCA "DX Monitor" bulletin reports on foreign AM BCB signals heard in Canada and the USA. This 168 page book is a reprint of all reports (geographic by frequency) throughout one DX season (6/77-6/78). It provides a valuable guide to what can be heard, when and where heard. **IRCA-7 $4.95**

## Van Jones "North American Station Guide."

Listing all radio stations, both AM and FM, plus TV stations in USA, Canada, Central America, Mexico, and the West Indies, the latest edition of this handy book has all the details you need. Frequency, call sign, geographical location of more than 11,000 stations, power, time sharing, network affiliation, FM antenna height, etc. Three separate lists arrange stations by frequency, by call sign, and by location. It's a DXers delight for fast identification. **NAR-13 $7.45**

## Can-Am Night Pattern Book.

Frequency-by-frequency outline maps show the lobe structure of each AM station to help you understand why you hear certain stations (and not others). Covers American, Canadian, Mexican, Cuban, and Alaskan stations. **NRC-2 $7.75**

# Show Your QSL Cards & Letters In These Display Albums

NA-23 $11.20

SML-2 $9.45

## Display Those Beautiful QSL Cards In These Colorful, Just-Right-Size Albums.

You've worked hard to secure those QSL cards and now you want to show just how remarkably attractive they are. No better way than in these sturdy simulated-leather finish albums.

Each album contains 50 transparent 5" × 7" pockets of soft pliable Polystyrol (additional pockets are available). Each pocket has a flap to seal out dust. And the black backing filler in each of the pockets may be removed so you can display both sides of the cards (most of us display the cards back to back so just the colorful fronts of the cards show).

The albums are available in green, red, blue, and black exteriors (when ordering, please specify your first and second choice of color).

Protect your valuable QSL card collection — put them in these handsome display albums. And don't forget your SWL friends — these make particularly fine gifts for them.

**SML-2 $9.45**

**Refills:** 10 pages, $2.00

## You Asked For It — A Display Album for Letter-Size QSL/Verifications.

At your request, we added these unique display albums to our line. And they are just right for the peculiar problems of displaying those varying sizes of QSL cards and letters of verification in an attractive manner.

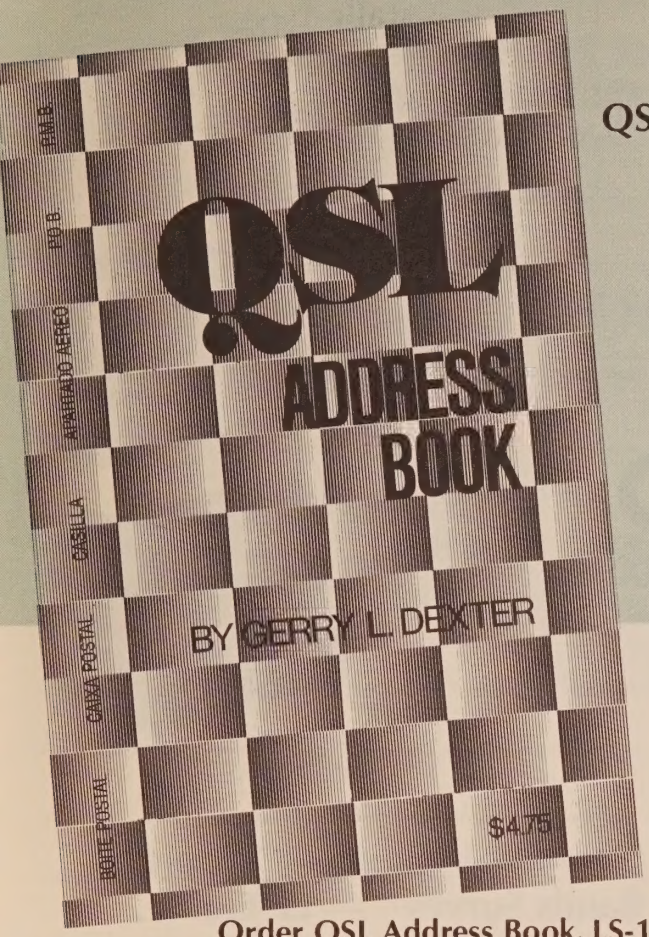
The size of these handsome albums is 8½" × 12". And inside are crystal-clear pages of durable vinyl. Twenty pages in all, in a mix of sizes. Some pages will hold three QSL cards of the standard size, some pages will hold two of the over-size cards commonly used, and other pages will hold letters up to 7" x 11" in size. No backing sheets are required, and both sides of the letters or cards can be displayed. Extra pages are available.

These sturdy binders have 23 chrome steel rings to hold the pages, and are available in either black or blue (specify when ordering).

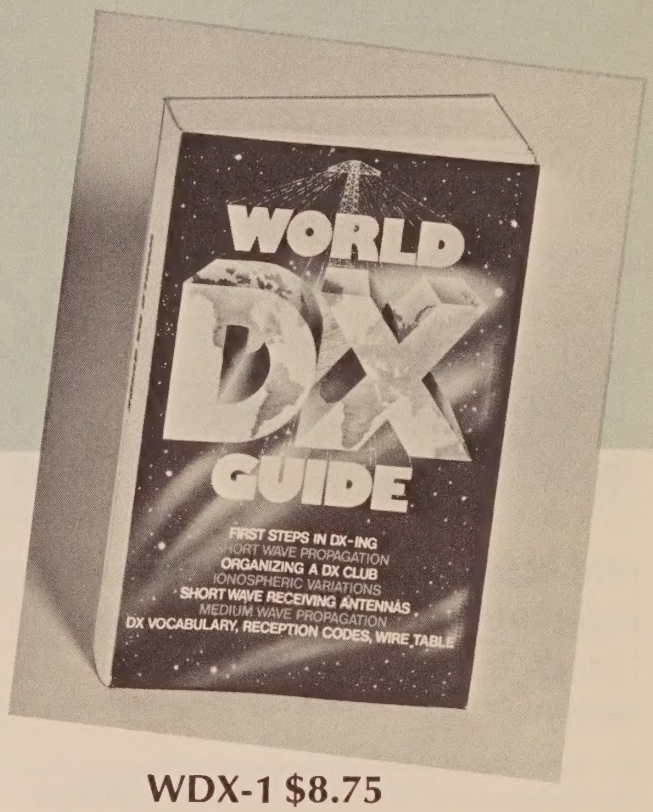
**NA-23 $11.20**

**Refills:** 10 pages, $5.50

# If You Want To Improve Your QSL Count — These Books Show You How.




QSL-3 $4.75




WDX-1 $8.75

**Order QSL Address Book, LS-1 Log Sheets, and RF-1 Reporting Forms (p. 22) and Save $1.25. All 3 for just $8.50.**

## Better Than Ever — Easier To Use, The New GILFER "QSL Address Book."

- **Lists over 800 Shortwave Stations**
- **Complete Addresses and Names of Verifiers**
- **Improved Grading System for Easier Reading**

When it comes to improving your QSL response, there's no better way to find out how to do it than this new book from GILFER by Gerry Dexter.

Improved and simplified from the sell-out previous edition, this new 96-page book gives you practical information gained first-hand by the author (what really happens — eliminating much of the hearsay and guesswork).

New text prepared by the author covers all of the ground rules for report writing, mailing, following up, and reply times. Illustrations show examples of actual verification letters and QSL cards.

The main body of the book is a tabulation by country of exact addresses and the names of the verification signers. A new simplified "grading" system quickly tells you what your chances are of getting a verification on your first try.

Another new feature in this edition are the "Heard" and "Verified" columns — places where you can record the dates you heard one of the 840 listed stations and the dates that the QSLs arrived.

Author Dexter is one of the top country hunters in the SWL world. He has verified 1050 shortwave broadcast stations in 219 countries and only one country has been heard and remains unverified. His QSL percentage is figured at about 85%.

To put your QSL seeking on a systematized basis that gives your efforts the greatest chance of success, add the new QSL ADDRESS BOOK to your library. You can get up in the top ranks too. Of the 182 countries detailed in the tabulation, only one country never issued any QSL's nor verified any reception reports before it disappeared from the maps — Kampuchea.

**QSL-3 $4.75**

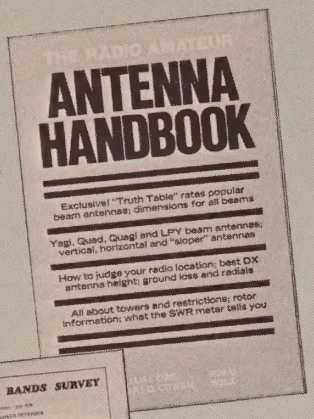
## World DX Guide — NEW

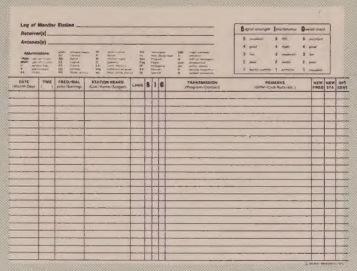
Published in 1978, this new book covers just about everything pertaining to your favorite hobby. 28 chapters on DXing, maps, tables, charts, information on propagation, interference, ionospheric behaviour, SW, MW, and TV antennas, SSB reception, plus the best articles published in "How to Listen to the World." Of particular interest are the chapters on radio wave propagation and fading and receiving antennas.

**WDX-1 $8.75**

# Books and Forms for Easier Listening

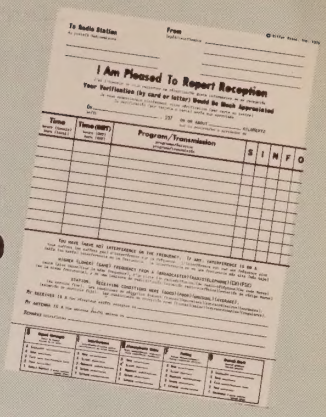
ANT-2
$6.95


THE RADIO AMATEUR
ANTENNA HANDBOOK
Exclusive! "Truth Table" rates popular beam antennas; dimensions for all beams
Yagi, Quad, Quagi and LPV beam antennas; vertical, horizontal and "sloper" antennas
How to judge your radio location; best DX antenna height; ground loss and radials
All about towers and restrictions; rotor information; what the SWR meter tells you



LS-1 $2.50

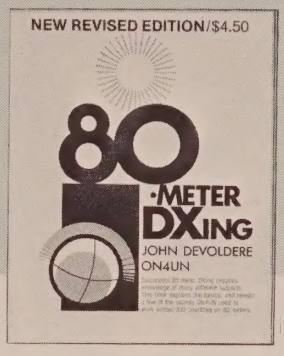
RF-1
$2.50




RF-1 + LS-1 + QSL-3, p 21,
only $8.50 Save $1.25

TB-6
$3.00

DX-80
$4.50




SS-10
$11.95

## (The Radio Amateur) Antenna Handbook — What the SWLer Needs To Know About His Antenna.

For the serious SWL, the way to achieving the right antenna is in this book. Although written for amateur radio ops, this new book gives enormous detail on all types of antennas, (beam, long wire, dipoles, and much more) without tedious math but with a lot of practical ideas and construction plans, tables etc. Best book we've seen on this subject. **ANT-2 $6.95**

## New 6th Edition — "Tropical Bands Survey" — LF Guide.

Danish Shortwave Clubs International produces this latest 28 pp guide to the world of 60, 90, and 120 meters. New, more-convenient-to-save size of 8×11" lists all information about "Tropical Band" broadcasters including the islands of Indonesia, Papua New Guinea, Africa, India, Caribbean and S. America. **TB-6 $3.00**

## Don't Trust To Memory — GILFER Log and Record Sheets.

Use a professional logging and record system to identify new stations, track the activities of those "must-hear" stations, and compare your DX with published lists. Easy-on-the-eyes green sheets provide optimum space for each station entry (date, time, call or slogan, freq., program, SINPO, etc.), plus space for QSL info. Sixty sheets.
**LS-1 $2.50 LS-2 Log Sheet (2 pads) $4.50**

## "80-Meter DXing" — Propagation and Antennas.

Written for hams, but if you are after the incredible variety of listening in the 60 and 90 meter bands, you'll need to know how a signal gets where it's going (propagation), what "black-outs" are (magnetic and ionospheric disturbances), and what the "gray line" phenomenon is. And you'll learn what makes a good antenna (resonance). **DX-80 $4.50**

## Improve Your QSL Return with GILFER Reporting Forms.

These forms are designed so each important English phrase is translated line for line into French and Spanish. Just fill in the reception details (call sign, slogan, freq., date, time, program, SIO and SINPO reception code, etc.). Fifty letters per pad.
**RF-1 $2.50**

## History of Communications — "From Semaphore to Satellite."

Over 350 pictures and 344 pages depict the invention, development, and usage of radio, radar, telegraphy, television, and facsimile from the 18th century to the 1970s. Engrossing reading. Issued by the International Telecommunications Union of Geneva, Switzerland, on the occasion of its Centenary. Makes a great gift.
**SS-10 $11.95**

Speed Your Visa/MC Card Order, Phone (201) 391-7887

# ORDER FORM

**GILFER SHORTWAVE**
**P.O. Box 239 52 Park Avenue**
**Park Ridge, NJ 07656 USA**

Name _____

Street Address _____
(important for UPS shipment)

City _____

State and Zip Code _____

Country (if not USA) _____

| Catalog Number | Item | Price |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

(Prices subject to change without notice)

☐ Check/money order
NO CANADIAN CHECKS — Send International Money Order or American Bank Money Order

☐ Credit Card

Total of merchandise _____
New Jersey Residents add 5% sales tax _____
TOTAL AMOUNT _____

Credit card orders:

Credit card # _____

Expiration date: _____

Signature: _____

## SHIPPING POLICIES

**Books** — shipped book mail. **Equipment** — shipped by United Parcel Service within the 48 contiguous states fully insured. Additional charge for other areas. **Receivers** — shipped United Parcel Service (whenever possible), shipping and insurance charges COD. **Canadian orders** — add $2.00 handling charge on each piece of equipment. **COD** is 10% down.

**Prices Subject to Change**

| SAMPLE COSTS OF SHIPPING RECEIVERS BY UNITED PARCEL SERVICE (insured) | | NRD-505 | FRG-7000 | FRG-7 | Pan. 2600 | Pan. 2900 |
|---|---|---|---|---|---|---|
| | New York City, NY | $ 8.59 | $ 3.96 | $ 3.21 | $1.78 | $2.10 |
| | Cleveland, OH | 10.01 | 4.99 | 4.24 | 2.22 | 2.59 |
| | Miami, FL | 12.33 | 6.67 | 5.92 | 2.94 | 3.39 |
| | Los Angeles, CA (surface) | 15.40 | 8.90 | 8.15 | 3.89 | 4.45 |
| | Los Angeles, CA (air) | | 17.35 | 16.60 | 7.52 | 8.48 |

Current rates as mid-year 1979

**GILFER**
*North America's*
*Shortwave Mail Order Place*
P.O. Box 239 52 Park Avenue
Park Ridge, N.J. 07656
United States of America

U.S. Postage
PAID
Park Ridge, N. J.
Permit No. 21